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EXAMINER	
BURGESS, BARBARA N	
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2457	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/056,887	DEGIULIO ET AL.	
	Examiner	Art Unit	
	BARBARA N. BURGESS	2457	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 July 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,6,9,10,12,13,30-34,62-65 and 70-77* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,6,9,10,12,13,30-34,62-65 and 70-77* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This Office Action is in response to Amendment filed July 3, 2008. Claims 1-4, 6, 9-10, 12-13, 30-34, 62-65, 70-77 are presented for further examination.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-4, 6, 9-10, 12-13, 30-34, 62-65, 70-77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elliott (US Patent 6,509,830 B1) in view of Durbin et al. (hereinafter "Durbin", US Patent Application Publication 2002/0091501 A1).

As per claim 1, Elliott discloses an apparatus for tracking a plurality of containers, wherein the apparatus is coupled to a status tracking structure that provides event information regarding at least a portion of the plurality of containers, the apparatus comprising:

- An event table for storing the event information (column 4, lines 55-67, column 5, column 6, lines 35-67, column 7, lines 1-30);
- A rule execution component, constituting at least a portion of a centralized tracking manager and coupled to the event table, that processes the event

information in accordance with at least one rule, wherein the at least one rule tests for non-optimal use of at least one object of the plurality of objects (column 2, lines 1-10, column 10, lines 5-15, 32-49);

- A configuration engine component, also constituting at least a portion of the centralized tracking manager and coupled to the rule execution component, that causes the rule execution component, without regard to occurrence of the event information and according to at least one user-specified execution frequency, to process the event information in accordance with at least a portion of the at least one rule (column 5, lines 15-25, 40-61, column 6, lines 50-67, column 9, lines 50-67, column 10, lines 5-47, 50-55, column 11, lines 1-14, 20-35).

Elliott does not explicitly disclose:

- Use of at least one container of the plurality of containers based on the event information and one or more degree of use characteristics of the at least one container.

However, in an analogous, Durbin teaches remotely monitoring a network of waste containers. Durbin further teaches polling for conditions in which alarms are to be triggered. Pollings can take place in predetermined intervals set by the user (Abstract, paragraphs [0016-0017, 0042, 0046, 0050-0051]).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate Durbin's containers in Elliott's architecture providing reports on containers indicating full and non-full containers.

As per claim 2, Elliott discloses the apparatus of claim 1, further comprising:
a configuration engine component, coupled to the rule execution component, that periodically causes the rule execution component to process the event information in accordance with some of the at least one rule (column 10, lines 5-15).

As per claims 3, 12, Elliott discloses the apparatus of claims 1 and 9, wherein the event information comprises location information (column 2, lines 26-28, column 5, lines 40-45).
Elliott does not explicitly disclose location information corresponding to the plurality of containers.
However, in an analogous, Durbin teaches remotely monitoring a network of waste containers. Durbin further teaches polling for conditions in which alarms are to be triggered. Pollings can take place in predetermined intervals set by the user (Abstract, paragraphs [0016-0017, 0042, 0046, 0050-0051]).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate Durbin's containers in Elliott's architecture providing reports on containers indicating full and non-full containers.

As per claims 4, 13, Elliott discloses the apparatus of claims 1 and 9, wherein the event information comprises environmental information (column 2, lines 26-28).
Elliott does not explicitly disclose environmental information corresponding to the plurality of containers.

However, in an analogous art, Durbin teaches remotely monitoring a network of waste containers. Durbin further teaches polling for conditions in which alarms are to be triggered. Pollings can take place in predetermined intervals set by the user (Abstract, paragraphs [0016-0017, 0042, 0046, 0050-0051]).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate Durbin's containers in Elliott's architecture providing reports on containers indicating full and non-full containers.

As per claim 6, Elliott discloses the apparatus of claim 1, wherein the at least one rule comprises at least two rules, and wherein configuration engine component associates at least two execution frequencies with the at least two rules such that a portion of the at least two rules is executed with a frequency different from other rules of the at least two rules (column 10, lines 30-49).

As per claim 9, Elliott discloses an apparatus for tracking a plurality of containers, wherein the apparatus is coupled to a status tracking structure that provides event information regarding at least a portion of the plurality of containers, the apparatus comprising:

- An event table for storing the event information (column 4, lines 55-67, column 5, column 6, lines 35-67, column 7, lines 1-30);
- A rule storage component (column 4, lines 64-67, column 5);

- A rule execution component, constituting at least a portion of a centralized tracking manager and coupled to the event table and the rule storage component, that processes the event information in accordance with at least one rule stored in the rule storage component, and wherein the rule storage component permits modification of any of the at least one rule independent of the rule execution component, wherein the at least one rule tests for non-optimal use (column 6, lines 35-67, column 8, lines 15-40, column 10, lines 30-49);
- A configuration engine component, also constituting at least a portion of the centralized tracking manager and coupled to the rule execution component, that causes the rule execution component, without regard to occurrence of the event information and according to at least one user-specified execution frequency, to process the event information in accordance with at least a portion of the at least one rule (column 5, lines 15-25, 40-61, column 6, lines 50-67, column 9, lines 50-67, column 10, lines 5-47, 50-55, column 11, lines 1-14, 20-35).

Elliott does not explicitly disclose:

- Use of at least one container of the plurality of containers based on the event information and one or more degree of use characteristics of the at least one container.

However, in an analogous, Durbin teaches remotely monitoring a network of waste containers. Durbin further teaches polling for conditions in which alarms are to be triggered. Pollings can take place in predetermined intervals set by the user (Abstract, paragraphs [0016-0017, 0042, 0046, 0050-0051]).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate Durbin's containers in Elliott's architecture providing reports on containers indicating full and non-full containers.

As per claim 10, Elliott discloses the apparatus of claim 9, further comprising:
an event engine component, coupled to the status tracking structure and the event table, that receives the event information, stores the event information in the event table and, in response, causes the rule execution component to process the event information in accordance with at least one immediate rule of the at least one rule (column 9, lines 57-67, column 10, lines 16-47).

As per claim 30, Elliott discloses in a system for tracking a plurality of containers comprising a tracking manager coupled to a status tracking structure that provides event information regarding at least a portion of the plurality of containers, a method in the tracking manager comprising:

- Receiving the event information (column 7, lines 7-30, column 9, lines 57-65, column 10, lines 1-15);
- Processing the event information in accordance with rules of at least one rule that are evaluated regardless of occurrence of the event information and according to at least one user-specified execution frequency, wherein the at least one rule tests for non-optimal use based on event information (column 5, lines 15-25, 40-61, column

6, lines 50-67, column 9, lines 50-67, column 10, lines 5-47, 50-55, column 11, lines 1-14, 20-35).

Elliott does not explicitly disclose:

- Use of at least one container of the plurality of containers based on the event information.

However, in an analogous, Durbin teaches remotely monitoring a network of waste containers. Durbin further teaches polling for conditions in which alarms are to be triggered. Pollings can take place in predetermined intervals set by the user (Abstract, paragraphs [0016-0017, 0042, 0046, 0050-0051]).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate Durbin's containers in Elliott's architecture providing reports on containers indicating full and non-full containers.

As per claim 31, Elliott discloses the method of claim 30, wherein processing of the event information further comprises processing the event information in accordance with periodic rules of the at least one rule (column 5, lines 63-67, column 6, lines 1-5).

Elliott does not explicitly disclose:

- Processing the event information in accordance with rules of at least one rule that are periodically evaluated regardless of receipt of the event information.

However, in an analogous, Durbin teaches remotely monitoring a network of waste containers. Durbin further teaches polling for conditions in which alarms are to be

triggered. Pollings can take place in predetermined intervals set by the user (Abstract, paragraphs [0016-0017, 0042, 0046, 0050-0051]).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate Durbin's containers in Elliott's architecture providing reports on containers indicating full and non-full containers.

As per claim 32, Elliott discloses the method of claim 30 wherein the event information comprises location information (column 2, lines 26-28, column 5, lines 40-45).
Elliott does not explicitly disclose location information corresponding to the plurality of containers.
However, in an analogous, Durbin teaches remotely monitoring a network of waste containers. Durbin further teaches polling for conditions in which alarms are to be triggered. Pollings can take place in predetermined intervals set by the user (Abstract, paragraphs [0016-0017, 0042, 0046, 0050-0051]).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate Durbin's containers in Elliott's architecture providing reports on containers indicating full and non-full containers.

As per claim 33, Elliott discloses the method of claim 30 wherein the event information comprises environmental information (column 2, lines 26-28).
Elliott does not explicitly disclose environmental information corresponding to the plurality of containers.

However, in an analogous, Durbin teaches remotely monitoring a network of waste containers. Durbin further teaches polling for conditions in which alarms are to be triggered. Pollings can take place in predetermined intervals set by the user (Abstract, paragraphs [0016-0017, 0042, 0046, 0050-0051]).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate Durbin's containers in Elliott's architecture providing reports on containers indicating full and non-full containers.

As per claim 34, Elliott discloses a computer-readable medium having computer-executable instructions stored thereon for performing the method of claim 30 (column 3, lines 35-67).

As per claims 62, 70, Elliott does not explicitly discloses the apparatus of claim 1, wherein the at least one rule determines whether at least one empty container of the plurality of containers has been allowed to sit for greater than a period of time.

However, in an analogous, Durbin teaches remotely monitoring a network of waste containers. Durbin further teaches polling for conditions in which alarms are to be triggered. Pollings can take place in predetermined intervals set by the user (Abstract, paragraphs [0016-0017, 0042, 0046, 0050-0051]).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate Durbin's containers in Elliott's architecture providing reports on containers indicating full and non-full containers.

As per claims 63, 71, Elliott does not explicitly discloses the apparatus of claims 1, 9, wherein the at least one rule determines whether at least two partially-full containers of the plurality of containers have been dispatched to a destination within a period of time.

However, in an analogous, Durbin teaches remotely monitoring a network of waste containers. Durbin further teaches polling for conditions in which alarms are to be triggered. Pollings can take place in predetermined intervals set by the user (Abstract, paragraphs [0016-0017, 0042, 0046, 0050-0051]).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate Durbin's containers in Elliott's architecture providing reports on containers indicating full and non-full containers.

As per claims 64, 72, Elliott does not explicitly discloses the apparatus of claims 1, 9, wherein the at least one rule determines whether a given container of the plurality of containers is less than half full prior to loading of the container on a vehicle.

However, in an analogous, Durbin teaches remotely monitoring a network of waste containers. Durbin further teaches polling for conditions in which alarms are to be triggered. Pollings can take place in predetermined intervals set by the user (Abstract, paragraphs [0016-0017, 0042, 0046, 0050-0051]).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate Durbin's containers in Elliott's architecture providing reports on containers indicating full and non-full containers.

As per claims 65, 73, Elliott does not explicitly discloses the apparatus of claim 1, wherein the at least one rule determines whether two containers of the plurality of containers are less than ninety percent full when combined.

However, in an analogous, Durbin teaches remotely monitoring a network of waste containers. Durbin further teaches polling for conditions in which alarms are to be triggered. Pollings can take place in predetermined intervals set by the user (Abstract, paragraphs [0016-0017, 0042, 0046, 0050-0051]).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate Durbin's containers in Elliott's architecture providing reports on containers indicating full and non-full containers.

As per claim 74, Elliott does not explicitly discloses the method of claim 30, wherein the at least one rule determines whether at least one empty container of the plurality of containers has been allowed to sit for greater than a period of time.

However, in an analogous, Durbin teaches remotely monitoring a network of waste containers. Durbin further teaches polling for conditions in which alarms are to be

triggered. Pollings can take place in predetermined intervals set by the user (Abstract, paragraphs [0016-0017, 0042, 0046, 0050-0051]).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate Durbin's containers in Elliott's architecture providing reports on containers indicating full and non-full containers.

As per claim 75, Elliott does not explicitly discloses the method of claim 30, wherein the at least one rule determines whether at least two partially-full containers of the plurality of containers have been dispatched to a destination within a period of time.

However, in an analogous, Durbin teaches remotely monitoring a network of waste containers. Durbin further teaches polling for conditions in which alarms are to be triggered. Pollings can take place in predetermined intervals set by the user (Abstract, paragraphs [0016-0017, 0042, 0046, 0050-0051]).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate Durbin's containers in Elliott's architecture providing reports on containers indicating full and non-full containers.

As per claim 76, Elliott does not explicitly discloses the method of claim 30, wherein the at least one rule determines whether a given container of the plurality of containers is less than half full prior to loading of the given container on a vehicle.

However, in an analogous, Durbin teaches remotely monitoring a network of waste containers. Durbin further teaches polling for conditions in which alarms are to be triggered. Pollings can take place in predetermined intervals set by the user (Abstract, paragraphs [0016-0017, 0042, 0046, 0050-0051]).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate Durbin's containers in Elliott's architecture providing reports on containers indicating full and non-full containers.

As per claim 77, Elliott does not explicitly discloses the method of claim 30, wherein the at least one rule determines whether two containers of the plurality of containers are less than ninety percent full when combined.

However, in an analogous, Durbin teaches remotely monitoring a network of waste containers. Durbin further teaches polling for conditions in which alarms are to be triggered. Pollings can take place in predetermined intervals set by the user (Abstract, paragraphs [0016-0017, 0042, 0046, 0050-0051]).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate Durbin's containers in Elliott's architecture providing reports on containers indicating full and non-full containers.

Response to Arguments

The Office notes the following argument(s):

(a) Durbin does not teach user-defined frequency for processing event information nor is such processing performed without regard to occurrence of the event information.

(b) Claim 2 does not recite a configuration engine component.

(c) Cited reference does not teach at least two execution frequencies with at least two rules as claimed in claim 6.

(d) References do not teach rules that apply to a container's status in order to optimize the system.

3. Applicant's arguments filed have been fully considered but they are not persuasive.

In response to:

(a) Both Elliott and Durbin teach user-defined parameters (frequencies) in which to execute rules on stored event information.

Applicant's specification discloses that frequencies are expressed in manners other than intervals of time. Particularly, in the context of a trucking business, a frequency could be a test of whether twenty or more empty trailers are currently within a yard. So, not only testing for empty trailers but rather if there is a certain number of empty trailers (Specification, paragraphs [0038-0039]).

Elliott teaches a record (event table) for storing event data (event information). The user specifies alarm parameters (frequencies) for an event data that makes it an alarm event data in which rules are to be executed. These rules include notifying a particular technician or contact person. Particularly, the tracking server receives and stores sensor data, location data, temperature, speed, time, etc. These are all event data.

However, contacting a person (rule) is only executed when certain parameters (frequencies) are met. These parameters are specified by the user. For example, if the speed data indicates 75 mph, then notify subscriber of excessive acceleration of the vehicle. Although several speeds (event information) have been reported and stored at the server, only the speeds meeting a specified parameter (frequency) trigger notification (rule) to be executed (column 5, lines 5-35, column 7, lines 20-30, column 10, lines 5-15, 30-48).

Durbin also teaches a record for storing container data. The user selects parameters for monitoring containers. When a certain parameter is exceeded, as specified by the user, a calling session begins. Calling sessions or polling calls occur when a user-specified parameter is met (paragraphs [0071-0075]).

Therefore, both Elliott and Durbin undoubtedly discloses user-defined frequency for processing event information nor is such processing performed without regard to occurrence of the event information.

(b) Claim 2 claims "an event engine component" that performs similar functions to that of a configuration engine component in claim 1. Therefore, the cited portions of Elliott include the cited portions of claim 1.

(c) Elliott teaches several execution frequencies such as acceleration and speed. Rules for these frequencies include contacting subscriber by paging, contacting by email, etc. (column 6, lines 40-67, column 10, lines 35-50, column 11, lines 28-45). Elliott, indeed discloses at least two execution frequencies with at least two rules as claimed in claim 6.

(d) Durbin teaches monitoring containers at certain specified parameters and performing rules to optimize the system so that users are informed of the status of the containers. According to Durbin, containers are monitored at 1/4, 1/2, of full or empty states. Calling sessions (rules) are executed when the monitored parameters are reached (paragraphs [0050, 0058, 0071, 0073]).

Therefore, Durbin discloses rules that apply to a container's status in order to optimize the system.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BARBARA N. BURGESS whose telephone number is (571)272-3996. The examiner can normally be reached on M-F (8:00am-4:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Barbara N Burgess/
Examiner, Art Unit 2457

Barbara N Burgess
Examiner
Art Unit 2457

October 25, 2008

/ARIO ETIENNE/

Supervisory Patent Examiner, Art Unit 2457